

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A semiconductor device comprising:

a switching element formed on a semiconductor substrate;

a first interconnect layer formed on the semiconductor substrate and having a first wiring connected to one terminal of the switching element;

a ferroelectric capacitor formed on the first interconnect layer and having a first electrode connected to the one terminal of the switching element via the first wiring;

a first protective film formed on the ferroelectric capacitor and the first interconnect layer;

a second interconnect layer formed on the first protective film and having a second wiring connected to a second electrode of the ferroelectric capacitor and a first interlayer insulating film having a dielectric constant of 4 or more and consisting essentially of SiO₂;
and

a third interconnect layer including at least one layer formed on the second interconnect layer, the third interconnect layer having a third wiring connected to the second wiring and a second interlayer insulating film having a dielectric constant of less than 4 and being a low-k film.

Claim 2 (Currently Amended): The semiconductor device according to claim 1, wherein the first protective film is a metal oxide contains at least one of Al_xO_y, Zr_xO_y, Al_xSi_yO_z, [[Si_xN_y]] and Ti_xO_y.

Claim 3 (Withdrawn): The semiconductor device according to claim 1, further comprising a second protective film formed between the first protective film and the second

interconnect layer and formed on the first protective film via a first insulating film with a dielectric constant of 4 or more.

Claim 4 (Withdrawn): The semiconductor device according to claim 3, wherein the second protective film contains at least one of Al_xO_y , Zr_xO_y , $\text{Al}_x\text{Si}_y\text{O}_z$, Si_xN_y , and Ti_xO_y .

Claim 5 (Original): The semiconductor device according to claim 1, wherein the third interconnect layer has a second insulating film formed on the second interlayer insulating film and having a dielectric constant of 4 or more.

Claim 6 (Withdrawn): The semiconductor device according to claim 1, wherein the second and third wirings are formed by a dual damascene method.

Claim 7 (Currently Amended and Withdrawn): The semiconductor device according to claim [[6],] 1 wherein the second and third wirings consist essentially of a Cu-based material.

Claim 8 (Original): The semiconductor device according to claim 1, wherein the second and third wirings are formed by a reactive ion etching method.

Claim 9 (Currently Amended): The semiconductor device according to claim [[8]] 1, wherein the second and third wirings consist essentially of an Al-based material.

Claim 10 (Canceled).

Claim 11 (Original): The semiconductor device according to claim 1, wherein the second interlayer insulating film consists essentially of $\text{Si}_x\text{O}_y\text{C}_z$.

Claim 12 (Original): The semiconductor device according to claim 1, wherein the second interlayer insulating film consists essentially of an organic material including a C_yH_y structure.

Claims 13-17 (Canceled).

Claim 18 (Original): A manufacturing method for a semiconductor device comprising:

forming a switching element on a semiconductor substrate;

forming, on the semiconductor substrate, a first interconnect layer which has a first wiring connected to one terminal of the switching element;

forming, on the first interconnect layer, a ferroelectric capacitor which has a first electrode connected to the one terminal of the switching element via the first wiring;

forming a first protective film on the ferroelectric capacitor and the first interconnect layer;

forming, on the first protective film, a second interconnect layer which has a second wiring connected to a second electrode of the ferroelectric capacitor and a first interlayer insulating film with a dielectric constant of 4 or more; and

forming, on the second interconnect layer, a third interconnect layer which has a third wiring connected to the second wiring and a second interlayer insulating film with a dielectric constant of less than 4.

Claim 19 (Withdrawn): The manufacturing method for a semiconductor device according to claim 18, wherein the second and third wirings are formed by a dual damascene method.

Claim 20 (Withdrawn): The manufacturing method for a semiconductor device according to claim 18, wherein the second and third wirings consist essentially of a Cu-based material.

Claim 21 (New): The semiconductor device according to claim 1, wherein the first interlayer insulating film has a higher density than the second interlayer insulating film.

Claim 22 (New): The semiconductor device according to claim 1, wherein the first interlayer insulating film suppresses diffusion of hydrogen which intrudes from above.

Claim 23 (New): The semiconductor device according to claim 1, wherein the ferroelectric capacitor includes a lower electrode, a ferroelectric film provided on the lower electrode, and an upper electrode provided on the ferroelectric film.

Claim 24 (New): The semiconductor device according to claim 23, wherein the ferroelectric film is composed of PZT.